

EutecTrode 1855XHD

Manual Metal Arc Electrode For Coatings And Joining Of Copper Alloys

DESCRIPTION

Very good resistance to cavitation, excellent resistance to marine corrosion, very high tensile strength, high elongation, low friction coefficient, very easily machinable. Aluminium bronze alloys are used to resist corrosion by sea water. EutecTrode 1855 XHD allows joining and repairing cast or wrought manganese-nickel-aluminium bronze materials with Maximum Safety Margin. When the precise chemical composition of the base metal is unknown, 1855 XHD can be used as it provides an elongation up to twice that of traditional aluminium bronzes with comparable tensile strength. Greater elongation means less stress in the areas along the weld bead, less distortion of the part with subsequent less risk of cracking, both for joined assemblies and for very thick overlays. Crack resistance.

APPLICATIONS

Multi-applications

XHD-1855 is ideal for corrosion resistance of coating large surfaces used in the chemical industry. It may be used for assembling complex aluminum bronze alloys, for rebuilding and modifying aluminum bronze parts or for coating parts subject to intense metal to metal friction. Ship propellers, propeller shaft sleeves, rudder components, turbine and pump housings, mixer blades, gear wheels, screw-shaft carrier rings, side plates, valve housings, roller extension segments, valve gates, turbine injector needles, forming matrices, pump turbines, winch components, rotary seals, shaping tools, bearings, heat exchanger plates, rotary valves, gearings.

PROCEDURE FOR USE

Preparation: Ensure that all areas to be welded are free from contaminants, oxides etc. For joining applications use suitable preparation.

Preheating: Preheating is not generally necessary. However when welding large heavy sections, preheating up to 150°C may be required with approximately 200°C maximum interpass temperature. For overlaying steel components, preheating depends upon type, size and mass of base material.

Welding: XHD-1855 has been developed with ease of welding as an important prerequisite. It provides good weldability even with low preheat temperatures. Striking and re-striking the electrode is easy, and the deposit is almost perfectly smooth and regular.

Employ minimum amperage for each diameter to minimise dilution. Maintain electrode angle near 90° and a short arc. Ensure that all slag traces and defects are removed, followed by thorough wire brushing after each weld pass.

TECHNICAL DATA

Tensile strength : 680 N/mm² (98,000 psi)

Yield strength : 430 N/mm² (62,000 psi)

Elongation : 30%

Typical Hardness : 175 HB

Current polarity: AC/DC (+)

DIAMETER	AMPERAGE
3.2mm	60-100

Note: For optimum result use the lowest amperage practical